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THOMAS G. NEWMAN,
EDITOR.

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EDITORIAL BUZZINGS.

Be True to yourself, and then you cannot be false to others, nor to your principles.

We have received a lot of samples of new honey labels from Abbott Brothers, Southall, London, England. They are elegantly printed, and make a very attractive appearance.

In Answer to Query 564, last week, on page 550, top of middle column, Mr. Shuck's answer should read thus: "I wouldn't risk them over four days old." The omission was an oversight of the writer.

A New Bee-Book is just published in the Welsh dialect, by H. P. and M. D. Jones, at Bala. Its title is "Y Gwenynda; sef Llaw-lyfr Ymarferol ar Gadw Gwenyn." It has 50 illustrations, and is sold in Wales for a shilling.

Our Pamphlet on "Honey as Food and Medicine," has been translated into French and printed in large pamphlet form, 20 pages. It is published at the office of *Le Rucher* by Alexander Le Roy, Rue Blinde-Bourdon 22, Amiens, and sold at 10 cents. It may also be obtained at this office.

Orange County, New York, it seems has had a good honey crop—or at least E. D. Howell, of New Hampton, says that his white clover honey crop is the best for 11 years. There are spots where they can enjoy the FUN of making such a fine showing, but in the great majority of places the cry is "no honey and no swarms," or "we have had the poorest crop of honey in a dozen years." But variety is pleasant!

Not a Nuisance.—Mr. Z. A. Clark writes that he was fully prepared to prove that his bees were not a nuisance, had the opportunity been presented at the trial before the Circuit Court. This is what he writes:

I had 25 witnesses summoned in defense of the Union, by whom I would have proved that the bees were not a nuisance; in fact, I never knew of a team or teamster ever being stung while passing my premises. The sole ground-work was prejudice and ignorance. They have now taken the case up to the Supreme Court.

Bee Stings.—The *British Bee Journal* gives the following remedy for bee-stings: Drop one drop of phenol diluted in water on the place stung; moisten with alum and rub for a few seconds, and the pain will disappear quickly.

New Bee Feeder.—M. E. Hastings, of New York Mills, N. Y., has sent us one of his Perfection Feeders, which is illustrated by the engraving. It will hold two quarts, and the letting down of the feed is regulated

by thumb-screw C. The cap screws on at A. It is easy to regulate—either a spoonful or a quart—and that amount can be given in an hour or a day, as desired. By it the food can be given where it is most needed—just over the cluster. Not a drop need be lost, and no robber bees can get at it. A single one can be had for 40 cents, or a dozen for $3.50, and it can be obtained at this office. Postage 10 cents extra.

How to Get Rid of Ants.—There are, says Prof. Cook in *Gleanings*, two good ways of destroying ants in the apiary. One is to find their nest and make a hole in the center of it with a crow-bar or other iron rod, then turn in half a gill of bisulphide carbon, and immediately fill the hole and cover it with a little clay, which should be trampled down. The liquid vaporizes and kills all the ants. Like gasoline, it is very inflammable, so it must not be exposed, either the liquid or vapor, to the fire.

Another way is to mix a little London-purple with thin syrup, and enclose it in a box with wire gauze so that the ants can reach it, but not the bees.

Hiving Bees.—W. J. Daniel, of Kentucky, has just patented a device for hiving bees. It consists of a double pole, the two lengths being held together by clamps, and adjustable at any heighth, with a hiving box at the top. As will be noticed by the following description from the *Scientific American* of Aug. 18, 1888, it has been repeatedly described in the BEE JOURNAL:

It is constructed with a standard having points on its lower end to take a firm hold on the ground, and a guide loop near its upper end for holding a sliding box or hive supporting section. The sliding section has a loop to clasp the standard, and at its lower end has a hinged extension piece, which serves as a handle for sliding the upper section, this extension piece having a sharp pin to strike into the upper section for holding the piece in folded position. The sliding section is held at any desired place by inserting a pin beneath it in holes provided therefor in the standard.

It was also described and illustrated in *Gleanings* for this month, page 611, and is claimed by A. C. Williamson, of Friendly, W. Va. A similar thing was also described several months ago both in *Gleanings* and the AMERICAN BEE JOURNAL, as the invention of S. W. Morrison, M. D., Oxford, Pa.

Some Curious Insects, by Noble M. Eberhart, B. S., Ph. D. This is a neat little cloth-bound volume, giving an account of the habits and peculiar characteristics of a number of interesting insects. The book is especially suited to children, affording wholesome and interesting reading, combined with valuable information and instruction. Illustrated. Price 50 cents. It is published by Eberhart & Son, 182 Dearborn St., Chicago, Ills.

When the Buckwheat Yields Honey.—Mr. S. J. Youngman, of Cato, Mich., under date of Aug. 12, 1888, remarks thus about buckwheat bloom:

I have observed that the buckwheat bloom yields no nectar in the afternoon in this vicinity. Is this a characteristic of the plant throughout the United States? Are some varieties better than others to yield honey?

Will those apiarists who have watched buckwheat bloom in various localities, please give the result of their investigation on this point.

The White Sulphur Springs, of Virginia, belonging to Mr. E. C. Jordan, one of Virginia's famous bee-keepers, had a very complimentary notice in the Havre de Grace *Republican* last week. In the "Bill of Fare" we notice as usual that "honey" holds a prominent place among the excellent variety of viands therein enumerated. The whole-souled "Host" looks out for the comfort and welfare of his numerous guests. If any of our readers want to take a "quiet rest," and enjoy the comforts of life, they should go to White Sulphur Springs, Va.

GLEANS OF NEWS.

A Cartoon appears on page 635 of *Gleanings* for Aug. 15. It seems that a "Rambler" is abroad in the land "taking notes," and is printing them. He mentions a plan for wintering bees which was being developed by a 16-year-old bee-keeper. Having purchased a swarm of a Frenchman he followed his directions for management. The Frenchman told him he never lost a swarm in wintering, if the hive was placed upon a wagon-wheel. The young novice followed directions; and what was the surprise of the father to find nearly all of his wagon-wheels arranged in an upper room, and hives placed upon them! The story runs thus:

"For the land's sake, Brodie, what are you going to do if you get a hundred swarms?"

"Why, dad, I can borrow wheels of the neighbors, or I can hire a wheel for a pound or two of honey, and it will pay; for the Frenchman said it's a sure way to winter bees."

After the Rambler's amusement subsided, a sober second thought led us to believe that the boy was only acting out the modern bee-keeper's spirit. Looking over the field we found nearly every prominent bee-man hanging on to his wagon-wheel. Doolittle's wheel is nature; Heddon's is pollen; W. F. Clarke, hibernation; A. I. Root, anti-patents; Miller's T supers, etc.

Our dreams that night as we rested under the roof of a cousin's residence, were filled with floating visions of wheels, potato-sacks, balloons, etc. Here is a mental photograph of the sublime scene. THE RAMBLER.

As the description by Brother Root is *richer* than the cartoon itself, we copy the following from it:

Now, friend R., that is really too bad. I was prepared to accept the fact that the rest of you have had at different times various wheel hobbies; but to put A. I. Root among the crowd touches a tender spot. Never mind; I believe I would rather be pictured bouncing patents (that is, the "individual-right" department) than anywhere else.

J. H. and W. Z. H. seem to be pretty near the top of the heap, with the pollen theory and "new revolution" bee-hives.

The editor of the AMERICAN BEE JOURNAL is represented next as very industriously fighting the "Wiley ile," and we are glad he has finally got it under foot.

C. C. Miller is still enthusiastic on T-supers, even if there is not any honey to fill supers of any kind, during this poor season.

Doolittle is taking things very philosophically under the shade of a tree. Even if there is a swarm hanging on the limb overhead, he does not propose to disturb himself until he gets ready.

Just beneath friend Doolittle we see a colony fixed for hibernation. I guess it must be under a strawstack. Our good friend W. F. Clarke, however, does not seem quite satisfied to "let 'em hibernate" after nature's fashion, for he has removed his plug hat, and our artist has taken him in the act of poking his head into the strawstack, to see how things are going. Very likely it is all tranquil. The Rambler, tired out by the adventures of the day, is sleeping the sleep of the just. We know it is the Rambler himself, for he has put his hat on the foot of the bed, and deposited his documents inside of it.

The Weather and Crops.—Old earth seems to be crazy. While we in America and those in Central and Southern Europe have been experiencing such cold and wet weather, in Norway the heat has been very uncomfortable. At Nyborg it has been as high as 95°, Fahr., and at Christiana it has repeatedly been from 86° to 89° in the shade.

In Great Britain this month has been characterized by cold rains, which have not done so much damage as might naturally have been expected. Everything turns upon the continuance of the good weather to the close of the month.

In France July has proved an exceedingly unfortunate month. Rain and cold, with very little sun, have damaged the crop prospects in every direction. The critical periods of the blooming and earing were passed under the most favorable conditions; and the complaints, which are increasing on all sides, make a late and deficient harvest certain.

In Germany the weather has been generally cold and rainy, with an occasional day or two or warmth.

The month has not particularly advanced the prospect of the Austro-Hungarian crops.

Up to the 10th of the month the general Russian prospects have seldom if ever been so brilliant. Later in the month dangerously persistent rains, accompanied by hail, were common in Southern Russia.

The wheat crop in Sicily has proved very deficient, but an average was obtained in Apulia, and the Neapolitan districts. Sardinia has almost lost her entire crop. In upper Italy the harvest is expected to prove fairly good in quality, but will not reach an average in quantity.

For thirty years the rainfall in Spain has not been so great, or the mean temperature so low all over the kingdom as in June and July of this year. There was snow at Valladolid on the 16th, and from every direction came news of damage to crops from the unseasonable temperature and the raging gales.

Telegrams from Greece about the middle of the month report that the current crop was in imminent danger of being lost; the vines being dried up with the scorching wind.

The harvest anticipations in Prussia are quite discouraging. The rye-fields, from which the great masses of Germany derive their chief bread supply, have suffered to a great extent, and the continued inclemency of the weather has likewise done severe damage to the fields.

Postage on Seeds, etc.—The new law making the rate of postage for seeds, etc., one cent for each 2 ounces, took effect on July 24, 1888. The new section reads thus:

That hereafter the postage on seeds, cuttings, bulbs, roots, cions and plants shall be charged at the rate of one cent for each 2 ounces or fraction thereof, subject in all respects to the existing laws.

Growing the Linden.—There has been some inquiries about sowing basswood seed, and for general information we copy the following from the *Western Tree Planter* for this month:

Heretofore it has been nearly impossible to obtain basswood seedlings, and even now the supply is very limited. Wherever we have run across any one in the West who was growing them, we have found that they were highly pleased with their rapid growth and extreme hardiness.

When the roots once become established it will be found to be next to impossible to kill the tree so that it will not at least start up from the old root and make rapid growth. If one is cut off close to the ground one or more shoots will immediately start up and make a rapid growth. We have seen logs cut and piled up in a mill yard out of which young trees had started and made a growth of 3 feet in a season, their entire sustenance having been drawn from the wet log. The basswood is certainly a hard tree to kill, and we hope it will be universally tried and tested the coming season.

We have, during the past two years, been experimenting on basswood seeds, but were obliged to work entirely in the dark, as from no one could we learn what was necessary to make the seed start. We now have a barrel of seed mixed with damp sawdust, which has been kept moist, for over 15 months, has frozen and thawed, but not sprouted when we last examined it. The seed, even after this long time, is in perfect condition. We are now trying the scalding process, which is always used on locust seeds, and hope that by this method to attain our object. Mr. McKinstry, of Chapelle, Dak., says that he has tried to grow basswood seeds, but never succeeded; but that the following year or two, he had found on the ground sowed to basswood seeds, a few seedlings. This would go to show that the seeds required at least two seasons to cause germination. If any one else has made any experiments, let us hear the result so that all our readers may be benefited.

Honey Season in Vermont.—A correspondent writing from Brandon, Vt., says: The honey season in this section seems to be a very poor one; bees are doing but little swarming and storing of honey.

G. S. Brown, of Salisbury, reports the loss of 42 colonies by spring dwindling.

The following printed in a local paper at Vergennes, gives the situation there:

The honey product will fall far below the average this year, owing to the cold and wet weather early in the season. A prosperous bee-man in this place considers the falling off in the product of his 200 colonies will be two-thirds. He should be able to market six tons of honey, but will be satisfied, from the present outlook, with two and one-half tons.

About the Chapman honey-plant our correspondent continues: "I have a small patch of the Chapman honey-plant, and I never noticed a plant which attracted the bees so much as did this globe thistle, during the height of its flowering season. There were two or three bees on every blossom about all the time. In raising it I have met with no difficulty from winter-killing or worms. If it had any other value than for honey, I should think bee-keepers would want ten acres apiece of it, as was expressed recently by one of your correspondents."

That Arkadelphia Bee-Suit.—In reference to the argument of Judge Williams before the Circuit Court, relative to the rights of bee-keepers to pursue their usual vocation (that of honey production, by keeping bees), Mr. A. R. Nisbet, of Dobyville, Ark., writes as follows:

I wish all the members of the National Bee-Keepers' Union, and in fact all the bee-keepers of America, could have been with us during the fight at Arkadelphia on the 4th inst. It would have made them all feel good to have heard Judge S. W. Williams read section after section of law, in Mr. Clark's favor, showing that a man's right to hold property is paramount to all legislative power; and any attempt to take away such right is unconstitutional. He certainly made an able defense, proving to all present that he was equal to the task before him. The trial was well attended by citizens of this county, a great many of whom were in sympathy with Mr. Clark. After the debate was over, the court adjourned until Monday, Aug. 6, when Judge Hearn, who occupied the bench, declared that the ordinance was unconstitutional and void. The ordinance forbade any person or persons to keep, rear, or own bees in the city of Arkadelphia, after thirty days from the date of that ordinance. I understand that the city has taken an appeal to the Supreme Court.

We fully believe that bee-keepers have constitutional *rights* which they should defend—which they are in duty bound to defend—and cannot be just to themselves and their successors in the business if they do not defend them! For that reason a *test case* was made in Arkadelphia, and the most popular and influential lights in the legal profession were engaged to defend the case. These were Judge S. W. Williams, and Maj. Witherspoon, assisted by attorneys Murray and McMillan.

The case now goes to the Supreme Court of the State, on an appeal made by the city of Arkadelphia. The Supreme Court meets in Little Rock next October, and it will there be defended by Judge Williams.

From Across the Border.—Our Canadian friends often send us words of congratulation, but none have been more welcome than the following dated Aug. 16, 1888, from our friend Mr. S. T. Pettit, of Belmont, Ont., the ex-President of the Ontario Bee-Keepers' Association:

EDITOR OF THE AMERICAN BEE JOURNAL:—I cannot let another mail pass without writing to say that your many thousands of friends over here are very thankful to you for the plucky manner in which you so effectually brought down Prof. Wiley from his exalted position, in the top of that *official* apple tree.

The missiles you so persistently hurled at him were ugly, sharp and heavy; but they had the desired effect, and the Professor had to come down, though he lingered long.

How any sane mind could charge the AMERICAN BEE JOURNAL with taking sides with adulterators is a puzzle—but then it often does turn out that those who work the hardest for the general good, get blamed and falsely accused, even by those whose good they seek; but we have faith in God and the future, that *truth, righteous truth*, will come to the front, and that justice will be done. We must not forget that *Gleanings* also did valiantly for the truth.

BIOGRAPHICAL.

Hon. Jonathan W. Cattell.

From the Iowa *State Register* we copy the following biography of this distinguished citizen and life-long apiarist:

Jonathan Wright Cattell was born in the county of Fayette, Pennsylvania, June 25, 1820. He was consequently 67 years and 3 months old at the time of his death. He remained in Pennsylvania until he became of age, when he moved to Columbiana Co., Ohio. Here, in the year 1842, he was united in marriage with Miss Deborah Edyson, who, now, after 45 years of a very happy wedded life, is left to grieve over his departure. In 1846, he and Mrs. Cattell removed to the then territory of Iowa, settling in Springdale township, Cedar county. Six years later the people called upon him to take the clerkship of the District Court, a position he occupied for four years. In this office Mr. C. showed the mettle of which he was made, by the manner in which he protected the interests of the county.

Upon retiring from the clerk's office, Mr. Cattell was elected to the State Senate from the county of Cedar, just then made a Senatorial district by itself. Almost from the first Mr. C. was influential. Here, as everywhere, he was a worker. Both in committee and in the Senate, this trait was conspicuous; so that when he spoke, which was not often, his associates listened, for they soon found out that he had something to say worth listening to. Such characteristics readily suggested him as a proper person to place at the head of the Department of Finance. Accordingly he was elected Auditor of the State in 1858. The same painstaking fidelity to duty marked his distinguished career in this responsible office. He introduced improvements into the manner of conducting monetary transactions of the State, as well as in the system of book-keeping. So well was this done that there has been no substantial change in these particulars since.

During Mr. Cattell's incumbency, which covered nearly the entire period of the war, when the expenditures were very heavy, the work was greater than it had ever been before; and it was well done, honestly, systematically, cautiously done. He was three times elected, as no one had been before him, and was very strongly supported for a fourth term. Now, after a lapse of twenty years, no higher praise can be bestowed on a public officer than to say he does as well as did Auditor Cattell.

After his retirement from the auditorship, he remained a resident of Des Moines. The following fall (1865), to his great surprise, he was called from his retirement by the Republicans of Polk County, to go back to the Senate. Again in that body, he was a member of almost the ablest Senate in the State's history. In this body, and the one which followed, which comprised in its membership our present Governor and many other strong men, Mr. Cattell was a leader, not because he sought leadership, but because it gravitated to him. His long experience in public affairs, the accuracy and fullness of his information, and his candor and conscientiousness caused his judgment on any question to be looked upon with especial favor. While in the Senate, or shortly after, he became President of the State Insurance Company, which position he retained for some years, establishing firmly the company's business, and its reputation for fair dealing.

About five or six years ago, Mr. Cattell removed to a farm he owned in Delaware township, which has been his home since.

In 1885, he was again placed in charge of the office of Auditor of State. The ability with which he conducted its affairs under the very trying circumstances which surrounded his incumbency, his ready knowledge of the duties of the position after an absence of twenty years from public life, were a surprise to those not intimate with him. His rulings upon doubtful points in law were never influenced by those circumstances, or affected by any extraneous consideration. This office he left in January, 1886, since which time he has lived quietly upon his farm.

Being childless, Mr. and Mrs. Cattell adopted and reared two children; one, Mr. Wm. H. H. Cunningham, now a resident of the territory of New Mexico; the other, Mrs. Edward Grimes, who, with her husband and children, lived with her adopted parents.

To the afflicted wife and children will be given the heartfelt sympathy and kindred grief of the entire State.

When he last visited Chicago, as his custom was, he spent an hour at the BEE JOURNAL office, for he was an enthusiastic lover of bees and their management. We little thought then that it would be our last meeting in this life.

Mr. Cattell, by accident, fell from a wagon on Sept. 23, 1887, and the hind wheel ran over him, producing internal injuries, which proved fatal on the Sunday following at 7:30 a.m.

This was a serious accident, but no one thought that it would prove a fatal one until just before he died. Even the words from his beside were of a cheering nature, for the hope was generally entertained that he would survive and live many years, for he had a strong constitution.

In personal appearance, character and disposition he much resembled the late President Lincoln—plain, modest, unassuming, but of sterling worth and noble mind.

We will Present a Pocket Dictionary for two subscribers with $2.00. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

The Traveled Bumble-Bee.

A bumble-bee, belted with brown and gold,
On a purple clover sat;
His whiskers were shaggy, his clothes were old,
And he wore a shabby hat;
But his song was loud, and his merry eye
Was full of laughter and fun,
As he watched the bob-o'-links flutter by,
And spread his wings in the sun.

A butterfly spangled with yellow and red,
Came flying along that way;
He had two little feathers on his head,
And his coat was Quaker gray;
He carried a parasol made of blue,
And wore a purple vest;
And seeing the bumble-bee, down he flew,
And lit on a daisy's crest.

Then from the grass by a mossy stone
A cricket and beetle came;
One with black garb, while the other shone
Like an opal's changing flame;
A swaying buttercup's golden bloom
Bent down with the beetle's weight,
And high on a timothy's rounded plume
The cricket chirruped elate.

The bumble-bee sang of distant lands
Where tropical rivers flow;
Of wide seas rolling up shining sands,
And mountains with crowns of snow;
Of great broad plains, with flower-gems bright,
Of forests, whose fragrant glooms
Showed crumbling ruins, ghostly and white,
Old forgotten nations' tombs.

Then wisely the beetle winked his eye;
The cricket grew staid and still,
The butterfly, in his great surprise,
Went sailing over the hill;
The beetle scrambled her eath his stone,
The cricket, he gave a hop,
And there the bumble-bee sat alone
On the purple clover top.

—*Dumb Animals.*

QUERIES AND REPLIES.

Rendering Beeswax.

Written for the American Bee Journal

Query 570.—In rendering out the wax from old brood-combs, does it make the wax darker if it is boiled in a cast-iron kettle, than it would be if a tin or copper kettle was used?—Bee-Keeper.

Yes, a trifle.—MRS. L. HARRISON.

I do not know.—M. MAHIN.

I do not know.—EUGENE SECOR.

Yes, usually.—A. B. MASON.

I do not know.—J. M. HAMBAUGH.

Yes.—R. L. TAYLOR.

Yes, sir, much darker. Iron should never come in contact with hot wax.—JAMES HEDDON.

I think not, if the kettle is clean.—C. C. MILLER.

I think not. A sun wax-extractor is the proper thing for a bee-keeper to use.—G. M. DOOLITTLE.

Iron kettles will always turn the wax dark.—P. L. VIALLON.

If the iron kettle is clean and bright, it will make no difference; but we prefer copper or tin.—DADANT & SON.

I tried this once and nearly ruined the wax. Tin, copper or galvanized iron is the proper material, and much lighter to handle.—C. H. DIBBERN.

I do not think that it does, if care is taken in the boiling, and after straining. Some of the wax-extractors, however, are preferable.—J. E. POND.

I do not see why it should. But I should not wish to boil the wax much in any kettle.—A. J. COOK.

I prefer a cast-iron wash pot that has been long used, rather than tin; for as soon as the sheet-iron loses its flimsy tin covering, it discolors the wax badly. Copper or brass will do very well if the wax is not allowed to stand too long in such a vessel.—J. P. H. BROWN.

The *kettle* does not color the wax. Excessive heating colors it, and worse that that, ruins it. Heat it just enough to get the wax out, and no more; *boiling* does no good.—J. M. SHUCK.

Some grades and mixtures of cast-iron will darken wax every time, while other grades will have no effect on it. You will notice that some iron kettles will always rust after use, and put away for a few days, while others never rust. Copper is best, as you are sure of the results.—H. D. CUTTING.

I have tried both when I used to have no better way to render wax, and there is no difference if the cast-iron vessel is smooth and clean. If there is red rust adhering to the inside of the kettle, it is sure to color the wax. But since the improved solar wax-extractor has been described and given to the public by the "undersigned," there is no further need of mussing with kettles of any kind.—G. W. DEMAREE.

Yes. Take the tin or copper kettle every time. If the iron kettle is old, well-used and perfectly clean, it might be used, but the ordinary run of iron kettles will color the wax.—THE EDITOR.

The Sex of Bee-Eggs and How Produced.

Written for the American Bee Journal

Query 571.—1. What is the sex of an egg before the queen has become pregnant? 2. When the queen mates with the drone, does it change the sex of the egg? 3. How is the sex produced?—E.

All the unimpregnated eggs produce drones, or males.—G. M. DOOLITTLE.

1. Male. 2. Yes, to a great extent. 3. I do not know.—C. H. DIBBERN.

1. Male. 2. No. 3. Refer to some of our bee-books.—P. L. VIALLON.

1. Male. 2. No. 3. By fertilization when the egg passes by the spermatheca.—DADANT & SON.

1. Male. 2. No. 3. The egg in passing down the oviduct, is impregnated in passing the mouth of the spermatheca.—MRS. L. HARRISON.

1. Male. But "pregnant" is not the proper word. 2. No. 3. Eggs become female by receiving the male germ in the act of being laid.—M. MAHIN.

Please read the books; get Cook's "Manual," or Cheshire's "Bee-Keeping." They are up to the times on this subject eggs-actly.—J. M. SHUCK.

1. Male. 2. No. 3. At the will of the queen. She has the control, and can fertilize the egg or not, as she may desire.—H. D. CUTTING.

1. Male. 2. It makes it possible for the queen to lay male or female eggs at pleasure. 3. See scientific works on bees.—EUGENE SECOR.

1. Male. 2. No, not until the egg is brought into contact with the male sperm. 3. There is a difference of opinion. *Not* by difference in the size of the cell; most likely by the *volition* of the queen.—J. P. H. BROWN.

1. I hardly think there is any egg before the queen is pregnant. 2 and 3. You had better send 15 cents to Mr. Newman for the "Dzierzon Theory," and get a full answer to this and many other questions.—C. C. MILLER.

1. The egg of an unfertilized queen-bee produces a bee of the male sex. 2. The mating of the queen does not of itself change the sex of the bee. 3. The sex of a bee seems to depend upon whether or not the egg from which it was produced was impregnated by the seminal fluid deposited by the drone.—R. L. TAYLOR.

1. Always masculine. 2. It changes the sex of every egg which comes in contact with the drone sperm. 3. I believe that the sex is controlled by volition on the part of the queen.—JAMES HEDDON.

1. It has no sex. 2. No. 3. If the egg, as it passes by the spermatheca, is impregnated—that is, if it receives sperm cells—the result will be queen or worker, otherwise drone. See some good book on bees.—A. J. COOK.

1. Male. 2. No. 3. Dzierzon says that the egg is "fertilized by one of the spermatozoa from the seminal receptacle of a fertile queen entering it as the egg passes down the oviduct;" it becomes transformed into the germ of a worker bee or queen.—J. M. HAMBAUGH.

1. Male, in all cases whether pregnant or not. 2. It does not. 3. By being saturated with the contents of the spermatheca when deposited in the cell. The question is too big for this department. Read "Dzierzon's Theory," or some text book on bees.—J. E. POND.

1. Your query is misleading, because it infers that the queen *may* lay eggs before she is impregnated, which is not true if the queen is impregnated at all. All my experiments in this direction, and they have been many and carefully made, tend to show that the virgin queen lays eggs until her amatorial period has passed. If she passes this period without meeting the male, she is likely to lay male eggs only. 2. No; but many of us believe that her "mating" gives potency to her male issue, which is lacking in drones from unmated queens. 3. Nature has provided the how.—G. W. DEMAREE.

1. The question is not properly stated. It cannot be said that the eggs of a virgin queen have any sex, but they invariably produce drones. 2. No; but she is then enabled to produce male and female progeny at her pleasure. 3. The egg is impregnated in the act of being laid, when it receives the male germ in passing the spermatheca. The pamphlet called "Dzierzon's Theory," would be very interesting to you.—THE EDITOR.

CORRESPONDENCE.

SHIPPING HONEY.

Time of Capping Brood—Do Bees Hear?

Written for the American Bee Journal

BY G. M. DOOLITTLE.

Some seem to think that it is better, in putting up honey for shipment, to pack it in the case with the top-bar of the section downward, or in a reverse position from what it was in building, claiming that it will stand more rough treatment without breaking down if put up in that way, than it would if shipped with the same side up as it was on the hive. This I think is a mistake, and a neighbor of mine says "he knows it to be so," after having packed some that way, which was badly broken, and having none broken when packing it right side up, as he always did till he tried this way. To prove his position, he says:

Take a section and fill it with comb foundation, attaching it only at the top, allowing the room at the sides and bottom, which is necessary to prevent it from being bulged in drawing out; and after the foundation is thoroughly secure, stand the section in the position which it is to occupy on the hive, then suddenly sway it from side to side. In doing this you will see that the foundation will stand any amount of sudden jarring, and not break from the box; but turn the section over and the foundation will hardly support its own weight, let alone any jarring or rough treatment, without falling over and off, especially if the weather is a little cool."

Formerly I used to pack my honey with the top-bar of the section down, as I was so instructed in my first shipment; but of late years I pack it the same way that it was on the hive, and after carefully going over the results of the past, I find that not nearly so much has been broken since I adopted the latter method of packing, as was formerly. Of course it may have been handled more carefully of late by the railroad companies, but I think not. In any event, this is a matter worth careful consideration, and I bring it before the notice of our apiarists at this time, so that it may be in season for immediate action, for it will soon be time to send our honey to market, if we have any to send.

At What Age is Brood Capped?

Picking up a paper not long since, I ran across an item setting forth the merits of the "bees-by-the-pound method." In it the party tells how they (the bees) were put in a hive on such a date, and ten days later they had enough brood capped over "to fill one whole frame." As the writer of the article uses the Langstroth frame, it is supposable that this was the frame meant, and if so, it would give about 7,000 as the number of cells of brood capped over.

There is a mistake here somewhere, or else I have been at fault all of my bee-keeping life, in my reckoning of the length of time that must elapse between the time the egg is laid by the queen, and the time the brood is capped over. Quinby stated in his "Mysteries of Bee-Keeping Explained," that the bee remained in the egg form three days, and in the larva form six days, covering a period of nine days from the laying of the egg by the queen to the time the larva was sealed over, this being accelerated a little by very warm weather, and retarded to some little extent by cool weather.

In all my observations along this line, I have found Quinby to be so nearly correct that I have taken him as authority on these points; therefore there must be a mistake somewhere, or else the queen in the case given above must have laid 7,000 eggs on the first day of her introduction with the bees to that hive. This is not at all probable, even if it were possible for a queen to reach that number of eggs in a single day; for no queen comes up to her maximum speed of egg laying the first day or first week after being placed in new quarters.

Some claim that the larva may be sealed over in five or six days from the time the egg is laid, but I cannot help thinking that such claims are made by those who have not thoroughly looked into this matter.

In many of the manipulations of the hive, a correct knowledge of this matter of brood-rearing is of much importance, and none ought to be satisfied with their "bee-education" till they have conducted experiments along these lines, so as to know for themselves.

Have Bees the Sense of Hearing?

Many seem to think that bees have the sense of hearing, but so far all of my experiments go to prove to the contrary. One says that he has known bees to run out of the hive to the queen when she had been removed with the surplus arrangement, or show their desire to get to her when she was on the frame he held in his hand, attributing such action of the bees to their hearing the queen call to them; but with me I see nothing in it but that the bees knew where the queen was by her scent.

One time, in hiving a swarm, the bees balled their queen, and in order to make a cage for her protection as I wished, she was hung in the shade on a limb of a tree not far off. Upon returning, after making the cage, I found that many of the bees had left the hive and clustered about the queen.

At that time I received the impression that the bees might have some sense of hearing, in order to get to their queen so quicky, but this thought was dispelled a little later in the season when, upon hiving two swarms together, I caged one of the queens for a little while, till I could dispose of her.

After disposing of her, I hung the empty cage in the shop several feet from the door, leaving the door open. After a little, the bees going with the double swarm became dissatisfied with the other queen, and balled her, when the usual excitement began which always exists in such cases. In a little while after, I went into the shop, when, to my surprise, I found a part of these bees on the cage that their queen had been in, thus showing that there was no hearing about the former proceedings of the others.

Borodino, N. Y.

SWARMING.

Bees do Select a Location before Swarming.

Written for the American Bee Journal

BY S. J. YOUNGMAN.

My experience of the last week will, I think, bear me out in saying that one of the mysteries of bees is solved, and the question, "Do bees find a location before swarming?" may most emphatically be answered in the affirmative. I will relate what came under my observation on Aug. 13 and 14, 1888:

My brother, and three other men, were at work about 100 rods west of my apiary in the edge of a forest at about 10 o'clock, a.m. They discovered bees in the top of a large ash-tree. I was called to see the bees, and to say what the prospects of saving them would be. The bees were about 50 feet from the ground, and were working very briskly. The sound of their humming could plainly be heard from the ground, at some distance from the tree. I proclaimed it a bee-tree, containing a large swarm, as there seemed to be thousands of bees at work. Arrangements were made to cut the tree the next day after dinner.

The men were at work near the tree, splitting rails, and about 11 o'clock one of the men observed a swarm of bees coming from towards my house near him. He instantly gave the alarm, and all the men gathered in time to see the bees fly to the ash-tree, and go into the same hole that the bees were issuing from the day before. I proceeded to cut the tree, as arranged, and found them to consist of a medium sized swarm, with a young unmated queen, and I succeeded in successfully transferring them to a Langstroth hive.

No honey was found in the tree, but it showed unmistakable signs of having been occupied by bees before, as there were chunks of propolis and fragments of comb adhering to the sides of the hollow.

The way I view this is, that when the bees were first discovered on Aug. 13, a very large force were cleaning out and preparing the hollow for occupation the next day; and had the tree been cut on the morning of Aug. 14, no bees would have been found; but on that day the bees occupied the tree in full force.

I think that this is the strongest evidence that bees do select a home in advance of their swarming, and prefer a tree that has been occupied by bees before, or at least such a place is not distasteful to them.

Cato, Mich., Aug. 19, 1888.

SULPHURIC ACID.

Its Use in Germany to Cure Foul Brood.

Written for the American Bee Journal
BY GERD WENDELKEN.

On page 345 is an article written by Wm. Klintworth, about bee-keeping in Germany, and how foul brood was cured there about 40 years ago. He mentions my name as one of those who cured the disease by the use of feeding sulphuric acid, but he does not tell how and in what proportion it was fed. I will therefore try to give briefly some information about it.

When in Germany, as Mr. Klintworth said, 40 years ago I cured foul brood with sulphuric acid, to my full satisfaction, and three other cases are known to me that were cured in the same way. Our fathers did not understand the nature of foul brood, but some understood how to cure the same.

Sulphuric acid has powerful destructive properties, and must always be handled with the greatest caution. If mixed with water, at the moment of mixture great heat is given out, and therefore the dilution should be performed by very gradually adding the acid to the water. The dilution should not be kept in tin vessels, but in glass bottles.

When fed with honey or syrup to foul-broody bees, it will kill the foul brood germs; but it has to be diluted to such an extent so as not to kill the bees and brood—1-700 or 1-800 part will do.

For an experiment in the spring of 1887, I fed sulphuric acid to my bees in the following way: I diluted one ounce of acid in one quart of water; then mixed this with syrup, and fed it to one colony, beginning with small, weak doses, and increasing by degrees until the bees refused to take it. Every night from March 15 to April 20 I fed ½ a pint of syrup with 2½ tea-spoonfuls of diluted acid. I found that this was not injurious to the health of the queen, bees or brood. At the end of that time I fed the rest of the medicated syrup to 10 or 12 other colonies. I have been told that the acid would kill bees and brood, but it does not, and cannot be done, because the bees do not take it when too strong.

If foul brood should ever get into my bee-yard, I would not be much alarmed. I would simply feed the bees regularly every night as described until well; and I would expect them to be all right in about two weeks. I know that what has been done can be done again.

It is best not to feed such a quantity with the acid mixed, as to be stored for winter use. There is no sure way to cure the disease without feeding the remedy to the bees, but it is a great mistake to feed or treat only such colonies as have already dead or diseased brood. Every colony must be fed and disinfected, because some seemingly healthy colonies may have the germs of foul brood in great numbers in the hives; old bees have them in their stomachs, and therefore they must be fed. The young larvæ must be fed in the cells, which can be best done and prepared by the nurse-bees.

Some prominent bee-keepers have recommended spraying the larvæ with the remedy, but the nurse-bees know better how to prepare the doses, and how much to feed the larvæ.

Some have also recommended burning the diseased colonies, but this is another mistake, I think. It does no good, for soon after some other colonies will be diseased, because the germs had been there before.

Marietta, O., Aug. 20, 1888.

PLEASANTRIES.

Review of the "Scientific Pleasantries"—Experiments.

Written for the American Bee Journal
BY G. W. DEMAREE.

A great many bee-keepers believe that Prof. Wiley is a sinner above other scientists in the perpetration of "scientific pleasantries," and doubtless some of the most credulous believe that the Professor laid "awake o' nights" in his scientific musings and searchings after the most effective "pleasantry" to hurl at bee-culture with deadly effect. No greater mistake than this could be made. Scientists do not do things in that way. No scientist expects anybody to credit his "pleasantries." In fact, the scientist of the evolution school is *never certain of anything* under the sun, nor above the sun.

Of course the frail, waxen fabric which we call honey-comb, with its dividing walls too frail to bear the touch of the most skilled finger of a life-trained artist, or any machinery known to the arts in realms sublunary, has not been wrought by machinery as yet, but when "Evolution" has had time to sweep the circle with his magic wand, it will be said, "Let there be machinery wrought honey-comb," and the thing will be "done." This is all the scientist knows about it, and he is not certain of that. It is to be hoped that the brethren will let up on Prof. Wiley for a spell, and turn their attention to some other scientific pleasantries. Our bee-literature is chock-full of them.

Honey as "Digested Nectar."

I have read, and it comes from high authority, that "honey is digested nectar." This is a "scientific pleasantry," stupendous in its magnitude and bearings, and yet we have heard no objections to it. It is by no means impossible for a pound weight of bees of the proper age to handle 15 pounds of crude nectar in eight hours. I think I have seen it done when the black locust was at its best, and the weather was exactly right. In this case a pound weight of live bees would have to furnish by ordinary secretion, gastric juice in sufficient quantity to digest 15 pounds of crude nectar in eight hours. No uncrazed thinker on the earth possessing brains enough to frame a thought, could believe such an impossibility. Notwithstanding, this "scientific pleasantry" has been handed around to the injury of the reputation of honey as a delicious food for mankind.

Not long since a pedagogue scientist in a lecture delivered in our town, referred to this matter, and asserted that honey was a "disgusting digested stuff disgorged from the stomachs of the bee," and therefore unfit for food for mankind. If it was true that honey is "digested nectar," that fact would take all the romance out of the word "honey," heretofore the synonym of all sweetness, and leave the article itself truly disgusting. But nothing never was further from the truth. Pure honey is nectar of flowers gathered by bees and reduced to proper consistency by the internal heat of the bee-hive. That's the whole of it.

Holding the Breath to Prevent Stings.

Some scientist has got off a "pleasantry" to the effect that a bee cannot sting a person "while he holds his breath." In fact one would take this for a "practical joke," to provoke a laugh at the expense of the "dupes" who would be credulous enough to try the experiment. A little practical good-sense ought to teach anybody better sense than these scientists seem to possess. I have felt the sting of a bee through a thick buckskin glove.

Well, the other day I tried the experiment to answer in a practical way, the query, "Can a bee sting a man while he holds his breath?" You see I am so indifferent about a bee-sting that any practical joker would fail when practicing on me. I selected a cross hybrid colony, and without the use of smoke, I turned up the quilt and rapped on the top-bars of the frames; this brought the little "war-dogs" bristling as they came. I held my breath firmly and passed my left hand with a rather quick motion just above the top-bars of the frames, and received a red hot thrust in the end of my middle finger, which drew blood in sight. I raised no question. No "umpire" was needed; the thing was well and fairly done.

Most people would have been fully satisfied with the experiment, but I did not care a great deal for one sting, and was willing to risk another. So I repeated the motion, with the right hand this time, and in a twinkle I was philosophically looking at a bee twirling round and round in its economical way of parting with as small a portion of its "inward parts" as possible when leaving its sting deeply set into the flesh of my third finger. That was the "best two out of three;" quoth I, "what fools these mortals be!"

I wish I had the time at my command to pursue this subject further. It is a wonderful subject. "Scientific pleasantries" are to be found in every department of our bee-literature, from the "business end of the bee" to the mighty claims of the "patent bee-gum man." But I cannot spare the time now. In fact I am really low down as pertains to the future propects of bee-culture in Kentucky. The surplus honey crop has been a failure, or nearly

so, for the past three years, owing to the decade of drouth years which has nearly destroyed the white clover. Hope revived, however, in May and June, as the young white clover looked very fine at that time, but the great heated spell of the past three weeks, without rainfall, has killed the young clover to an alarming extent. It is not so hot now, but the rain tarries, and hope is deferred.

Christiansburg, Ky.

AUTUMN BLOOM.

Golden-rod and Aster Honey, Fall Management, etc.

Written for the New England Homestead

BY SAMUEL CUSHMAN.

Most colonies in our apiary are so contracted that there is little room for honey in the brood-combs, and it will not be extracted, but as soon as the boxes (or sections) are removed, a sufficient amount of sealed stores will be given from other hives. One colony in the home apiary has been employed for a month in storing syrup in empty brood-combs, which, as soon as they are filled and sealed, are removed and replaced by empty combs. These are to be carried to an out apiary, where we make short stops and cannot feed in the usual way. We also use them late, if needed, after it is too cold to feed syrup.

To secure a large crop of fall honey, Italian bees or the yellow races are the most suitable, as they work later in the season, and with more energy than black bees. To rouse them from the winter quiet—a state they are then approaching—part or all of the brood-combs are removed, and sheets of foundation put in their places. The desire for a winter's supply of honey, and the work on the foundation stimulates the bees' energies to the utmost, and as fast as the combs are drawn out and filled, they may be extracted and returned and again extracted as often as filled. By removing the honey often, the bees are kept at work as long as the flow continues. In this way 100 pounds per colony have been obtained where but a few hives are kept. As this draws on the vitality of a colony, and calls forth energy that would have been available in the spring, it may be wise to strengthen such colonies before wintering, unless they have an abundance of young bees.

In this location, this honey, as a rule, is not obtained except in brood-combs, and as it is excellent for winter stores, is allowed to remain. My Cook apiary is where there is much runout land grown up to weeds and brush. Here golden-rod and asters are very plenty. Being on a hill where it is rather bleak, a board fence was built on all sides; with this protection they venture out many times, when if the hives were exposed to the strong wind they would remain inside. It is also high and dry, and frosts hold off until late. Here bees have never failed to get enough late honey for winter stores.

At the beginning of the flow last fall, the colonies were almost without stores but very populous. All brood-combs not containing brood were removed, leaving from four to six combs two thirds full of brood, nearly all of which was capped. The vacant space in the brood chambers was filled with dummies and surplus sections containing drawn out combs placed above, the hive covered with chaff cushions, and the entrance made rather small. After a hard frost I examined them and found that nearly all had from 12 to 20 pounds of honey in sections, two-thirds of which were nicely sealed, the remainder uncapped, and but partly filled. The brood-combs were solid with honey, with the exception of a space for bees to cluster in the center combs. The honey from golden-rod coming first, most of it was stored below in the room made by the fast hatching brood. The flow from asters came after, and as the space below was mostly filled, much was stored above.

The honey in some sections nearest to the center of the cluster was two-thirds golden-rod with aster honey about the edges, and was thick, well filled and finished; that further away was clear aster honey, nicely finished, and very clear and handsome; that furthest from the cluster was poorly filled, unsealed and thin. The wax cappings at this time are quite yellow from the pollen in the wax. Had I given less room in the brood-nest, and frequent attention, I should have secured less honey below and more above, but the colonies would have needed more stores for winter.

This result shows that the obstacles in the way of producing this honey in the comb may be overcome. It also shows what is possible in a better season, or in a still better locality. Although less in amount will be taken in boxes than in the extracted form, it will be worth more money.

If but one or two brood-frames of foundation are allowed below, and a few sections of drawn out comb above, and as fast as finished are removed and replaced by others, a large number may be secured. There is little danger of the queen laying in sections at this season. The proper amount of space below and above to get the best work and all the pollen below instead of above in boxes, will be learned by experience. At this season drawn-out combs should always be used instead of foundation in the sections.

A late-reared queen will have considerable brood late in the season, at a time when there is usually little or none. This is a great help to force the honey above, and if the bees of another colony are united to these, success will depend only upon the weather and the secretion of nectar. When the summer flow has yielded no surplus, I believe it will pay to secure this late crop in comb, even if all colonies have to be given sugar stores for winter. The latter should be stored and sealed in warm weather, and be ready to give when the other is removed. Instead of following this plan extensively, it may be best, in your locality, to try it the first season with but 1 or 2 colonies.

Pawtucket, R. I.

CANADA.

Report of the Brant Bee-Keepers' Association.

Written for the American Bee Journal

BY R. F. HOLTERMANN.

The Brant Bee Keepers' Association held their quarterly meeting at the Court House in Brantford, Ont., commencing at 2 p.m., on Aug. 11, 1888 In the absence of the President and Vice-President, Mr. T. Birkett, of Brantford, was elected to occupy the chair.

Reports of the Season of 1888.

The season's reports were then given as follows:

C. McNally, of Simcoe, said that fruit-bloom had yielded fairly well. They had but little clover, owing to last year's drouth. Linden yielded but little. They have a great deal of buckwheat about them, and he expected quite a number of pounds of surplus from that source. It was yielding well at present, one colony having filled, without capping, an 8-frame Langstroth super in 1½ days. He had nearly doubled his colonies.

J. R Howell reported up to the close of the linden about the same as had Mr. McNally; but he secured some linden honey. The Chapman honey-plant came into blossom, and the bees worked very well on it; from the colony that appeared to have the most honey from it he extracted, and had a sample of the honey present, which was first-class. His increase was 50 per cent. The Secretary reported that he had secured about 5 pounds per colony up to linden bloom, and had now from thistle, clover and linden, an average yield of about 20 pounds per colony, or 1,000 pounds; and he expected enough for winter. His increase was 10 per cent., and besides, he had formed nuclei and reared about 70 queens.

T. Birkett reported that his bees had done but little until within the last three weeks. He had secured from about 67 colonies, spring count, about 1,000 pounds of honey, besides comb honey, and plenty to winter them on. His increase was about 30 per cent. He had allowed several swarms to go together, and these were the colonies which gave him the increase.

C. McAllister said that he had put 20 colonies into winter quarters last winter, some of them being light. They had increased from 8 colonies. All but one colony wintered; 4 more were lost by spring dwindling, and the remainder had done well lately, but not before.

Feeding Bees for Winter.

W. Phelps, of Mt. Pleasant, asked: "Does it pay to feed for winter?" C. McNally said "No; I fed 64 colonies $125 worth of sugar one fall. I feed some every year. Bees should be fed early."

The Secretary said that he did not want to feed, and he keeps two full combs for every hive, which, on an average, will be enough for winter stores, besides what is already in the brood-chamber. He finds that bees

gain but little more than half in weight compared with the heavy fed ones. He feeds rapidly, and if he must feed, he would feed sugar syrup in preference to honey. While he strongly condemned feeding at all, if bees had not enough stores for winter, he fed sugar syrup.

"Do you use feeders?" was asked. One bee-keeper fed by pouring the feed in the back of the hive; others fed in pans with floats of some kind.

It was then moved, and after discussion, carried, that the North American Bee Keepers' Society be invited to hold their annual meeting in 1889, at Brantford, Ont.; promising the Society a free hall to meet in, reduced hotel rates, and that this association would make every effort to make the meeting a pleasant one.

Difference in Worker-Bees' Energy.

J. R. Howell asked what could account for the difference in energy of worker-bees. C. McNally said that bee-keepers were running too much to color in bees. He found of his best looking bees the poorest workers. The writer thought there was a tendency in this direction; he did not mind a little black blood in the bees, in fact he preferred it, but wanted only a very little.

The Perforated Queen-Excluders.

A discussion took place upon the necessity of perforated queen-excluders in producing extracted honey. Messrs. Dickie, Birkett, Howell and Holtermann used them and liked them. Some complained now and then that a queen passed through. C. Culver, of Bloomsburg, pointed out that it was important to have a bee space on both sides of the board.

The convention then adjourned to meet in December.

Brantford, Ont.

FOUL BROOD.

Theories of the First Cause of the Disease.

Written for the American Bee Journal

BY JAMES A. GREEN.

As to what may be the first cause of foul brood I believe no theory has as yet been advanced that will satisfactorily cover all cases.

The theory of Cheshire, that it is caused by bacilli, or minute vegetable organisms, is the one generally held by those who have studied the disease. If we accept this, we must suppose that all cases of foul brood are traceable to infection from some first case or cases. Bacilli can no more grow without seeds than corn or wheat. It seems somewhat difficult to account for all cases on this supposition, although if Cheshire's theory be true, that the bacilli or spores may be deposited by the bees from infected hives on the blossoms they visit, to cling to and be carried away by other bees that visit the same flowers, we can easily see that the disease might be quickly spread over wide reaches of territory. The intervening links might then be destroyed in some way, leaving cases of foul brood apparently many miles away from any source of contagion. Even without this way of spreading, the disease may be carried far and fast by swarms escaping to the woods, and by robbing.

The credence given to Cheshire's conclusions is no doubt largely because they are in accord with what is known as the "germ theory" of disease. This is very captivating, very plausible, and a very convenient pair of shoulders on which to lay the burden of most of the disease that afflict the inhabitants of this mundane sphere.

It is not my intention to attack this theory. Apparently it rests on too firm a foundation to be overthrown. The whisper, though, is not unheard in scientific circles, that over zealous investigators have sometimes mistaken effect for cause, in concluding that because bacilli accompany a disease they necessarily produce the disease.

There are objections to the bacillus theory in the case of foul brood. One is, that Cheshire declared himself unable to detect either bacilli or spores in honey, and gave it as his opinion that the disease was never, or at least but very seldom, transmitted by means of honey. So far as I know, no microscopist has had any better success in detecting either bacilli or spores in honey. Yet the almost uniform testimony of all who have had practical experience with it is, that it is through the medium of the honey that it is most frequently and surely transmitted. The most practical and successful methods of cure are based on this assumption, while those which ignore it have in practice proven uncertain and unreliable.

Starvation as a Foul Brood Cure.

Cheshire declares, furthermore, that foul brood is not simply a disease of the brood, but that *bacillus alvei* affects the mature bees, both workers and queen. If so, they are very easily disposed of, for I have repeatedly cured the worst cases of foul brood by simply confining the bees without food for 48 hours, then putting them into a clean hive, and still more simply by brushing them from their infected combs into a clean hive, where they were obliged to build comb before brood could be reared.

The plain inference is, that the contagion, whatever its nature, is contained in the honey, and that it is destroyed when the honey is digested. Possibly the digestion of the last particle of honey does away with the bacilli so numerous in the vitals of bees and queen; but many will be inclined to doubt.

All attempts to get rid of foul brood without boiling, or equivalent treatment for everything except the bees, have proven tedious, uncertain and unsafe. By "equivalent treatment," I mean a thorough washing or admixture with carbolic or salicylic acid. To spray the outside of an infected comb is useless. While it is possible that the fumes of sulphur may be a sufficient disinfectant—though I do not believe it—the process must be more thorough than that recommended on page 539. To put infected hives and frames out of doors in the summer—exposed to the bees—as there recommended, and then depend upon scraping and sulphuring, is simply to invite destruction.

The correspondent on page 538, has very evidently had little experience with foul brood, or he would not venture so wild an opinion as, that it is caused by the larva getting reversed in the cell, and that the puncture in the cap of the cell is made by its "sharp end" in the effort to get out.

The fact is, that foul brood nearly always attacks the larva before it is old enough to be sealed up. Even when it is attacked after it is sealed, the cap is by no means invariably punctured nor perceptibly sunken.

Ropyness the Test of Foul Brood.

The best test of foul brood is the ropy, tenacious, *slightly* elastic condition that the diseased larva assumes. Do not expect, though, that it will "snap back into the cell like a piece of India rubber when you pull it out with a stick," as some have said. I was not in favor of this test once, simply because too much stress was laid on the elasticity of the diseased matter. Remembering that its elasticity is but slight, this feature becomes our best criterion.

Dayton, Ills.

FINDING HONEY.

Uncle True's Experience in Getting it Out of a Chimney.

Written for the Boston Traveller

BY H. P. BARNARD.

Uncle Joshua True and Solomon Baskins lived in a double house. It was Sunday, while the Baskins and Trues had gone to meeting, leaving Joshua at home alone.

Suddenly, something like a small black cloud came between him and the sun; Uncle True looked up and saw that it was a swarm of bees hovering directly over his bald pate, which he covered with both hands and fled to the house. Like a living ball they hung suspended a moment, then swept toward the house-top, alighting upon an unused chimney. Uncle True ventured out and eyed them wistfully.

"Why couldn't ye come a week day?" he growled. "Then I could a got Collins—he's a great bee-man—and we'd put ye into that empty hive. It's a pity it's the Sabbath; a clean ten dollars as good as throwed away."

But soon his face brightened. There was the skylight, he could put the hive out of that, perhaps they would take a notion to it.

A moment later Uncle True was puffing up the attic stairs. The nerves in his crown crawled, as he remembered how it had seemed to attract the insects; still he ventured a leg out upon the long sloping roof, and gently proffered a home to the rovers, muttering:

"There, ye can't do better'n that!"

They rose in a body, and with them Uncle True's hope; only to fall again, as they at their queen's behest went down into the Baskins' chimney!

"Pesky things!" he ejaculated. As the church-goers were returning he withdrew the hive, closed the skylight with a bang, and then appeared below just as Aunt True bustled in.

"Feel better, Joshua? Such a sermon as we had—you don't know what you missed."

"I'm alluz missing something!" Uncle True answered, crossly.

"Why, what's the matter?"

Then he told her how the bees had come, and "every soul of 'em gone into Baskin's west chimbly."

Aunt True sat right down, bonnet in hand, while Joshua enlarged upon the subject. He said he'd a given anything if the bees had come to him; he would have planted buckwheat for them, and in the fall smoked them out, and gathered the honey.

Suddenly Aunt True spoke. "I don't care if them bees be in Baskin's chimbly! You found them, and you've the fust right; besides it opens in our cellar, and that gives us some title to them."

"That's so!" cried Uncle True. "Of course they belong to me—no question but the law'd decide that! But Baskin's might not think so!"

"I don't s'pose he'd divide," said Aunt True, "them Baskins is bound to get all there is, every time! I shouldn't mention the bees; maybe they wouldn't find it out all summer."

"Fact is, it's alluz best to manage folks quietly," chimed in Uncle True.

Little did either dream what a part they would have to act; or how often be forced into untruths.

Never were there such active, hot-tempered insects—the young Baskinses were continually getting stung by what they called hornets.

"It is a powerful year for 'em; I've got stung myself?" said Uncle True.

"Must be there's a nest under the eaves," she said, as she applied saleratus water.

And Uncle True pretended to hunt for it. Then, when the garden blossomed to buckwheat alone, and Baskins was amazed, Uncle True explaining the unusual spectacle by saying he "liked to see it blow!"

Later in the summer Joshua could not forbear an inspection of the chimney, so he took cement with him that he might be able to say to the Baskinses that he was mending the chimbly!"

The buckwheat blossomed, and its sweetness was culled by the busy insects. "Reg'lar workers, they are," Uncle True often said, gleefully. "That chimbly must be filling up fast. Things have gone along nicely. The Baskinses don't mistrust; just as soon as they start, we'll get the honey."

The buckwheat faded.

"When are the Baskinses going to the beach?" each asked the other.

The summer went, but alas, the Baskinses stayed; they "couldn't afford the seashore" that year! It began to look as if Uncle True would never get a chance at the colony. Fortunately, the fall was unusually long and warm, and the bees kept on working clear up to Thanksgiving. On the morning of that day, Mr. Baskins started for his native town with his family.

"Calc'late to make a long stop, neighbor?" Uncle True spoke carelessly as possible.

Mrs. Baskins said, "Pa wouldn't hear to their coming home till the next afternoon."

"They've gone at last—coast's clear!"

Even that fact did not open the way for an immediate attack upon the bees. The Trues waited, fearing the Baskinses might return for some forgotten article; then company came and stayed all day. "They have spiled our best chance!" Uncle True said dolefully.

"Never mind," said Aunt True, "we'll get everything ready for an early start to-morrow."

The Trues retired long before the usual time, and slept too soundly—for they did not hear the Baskinses return, about midnight. As Mrs. Baskins said "Pa's too full to accommodate us!" which might have been taken literally after "Pa's" hearty dinner, but what she meant was the ancestral bed-rooms were filled with relatives from a distance. As these were from a cyclone district, the young Baskinses heard a tale of horror that sank deep into their minds.

"No part of our country is safe these days," said Baskins.

"Out our way we're prepared," said the cyclone representative: "We have a cave in the cellar to run into; let the house sail off then, we're safe!"

"The wind's going to sweep us yet," said Baskins, rolling his big eyes prophetically; "what's to hinder? folks is cutting off trees, and leveling the hills as fast as they can. Some day they'll wake up and find themselves to the mercy o' the elements.

Under the circumstances, it is not surprising that the children and Mrs. Baskins dreamed of cyclones.

The Trues began operations at daybreak. A smothered chip fire was lighted in the opening of the chimney to smother out the bees.

"I don't calc'late they're very far down," said Uncle True; "guess I can reach them with a long-handled spoon."

Then he equipped himself in a hat draped with musquito netting to his waist, a long iron spoon and preserving kettle, and started skyward. Mrs. True took a favorable sight-seeing position in the back-yard.

Uncle True peered cautiously into the chimney.

"It's jam full 'o suthi'," he told Aunt True; "must be a powerful big swarm."

"Sure, they are smoked out enough, Joshuay?"

"Oh, yes, they're quiet; none o' them aint going out or coming in. There's a leetle buzzing, but that don't 'mount to nothing—no more'n a hen's flutterin' when her head's chopped off!"

While doing two things at once—speculating how much sweetness such a colony could procure, and thrusting in the spoon—Uncle True's elbow started a brick down the chimney. In an instant that "powerful swarm" darted up right into Uncle True's face, as he peeped intently over. With a howl of fright, he dropped the kettle. It rolled and bumped the length of the roof, then bounded off, striking the ground just where Aunt True stood a moment before.

This woke the Baskinses like an electric shock. They sat up in bed bewildered and frightened. Then, hearing the clatter of Uncle True's boots down the slope of the roof, Baskins said:

"It's probably a cyclone; we haven't had the equinoctial yet! The only thing that'll save us is to get out of the house and away from the trees!"

As the Baskinses fled out of the back door, Uncle True, wishing only to distance the bees, suddenly dropped among them, in their back yard, and rolled over groaning. Perhaps they took him for some strange being, tipped off another planet by a freak of the cyclone; at any rate they did not recognize him in his "bee-protector," for as the figure flopped its hands wildly skyward, and gasped for speech, Baskins shouted:

"Run, all on ye? Make for the open field!"

"Run" they did, fast and far, screaming till the neighborhood was aroused.

As the Baskinses crowded through the gate that opened into a large field, the elder Baskins looked back to see if the house had gone over. To his surprise, it remained apparently firm, not even the chimneys had started. He noted also how still the trees were, and what a perfect morning it was.

"Surely, this is no cyclone," he said, and at once ordered a halt, while he went back to reconnoitre. His attention was at once called to the groans of Uncle True, who was being helped over the fence by his wife. The former, seeing through his thick veil that it was Mr. Baskins, called out:

"I've had a terrible fall, neighbor Raskins; I think I've broke my back. I'll never fix a chimney again!" With that he was ushered into the house, and the door slammed behind him.

As Mr. Baskins gazed upon the roof of the house, and saw many bees flying angrily around the chimney, the absence of several bricks, a long spoon and iron kettle on the ground, a dilapidated patch of buckwheat in his neighbor's yard, the truth gradually dawned upon him.

"Come back!" he shouted to his family; "it's no cyclone—only one of old True's experiments."

As Joshua True sat bolstered up in his armchair before the fire, it seemed as if every one who passed the house looked at the chimney and smiled. Even the boys paused on their way to school, explaining to some new-comer: "O d True's home run down the roof." Bert also, although innocent, was punished for the sins of his parents, for his playmates called him "Honey."

This was more than Uncle True could bear; he decided to move away, and start anew among strangers. It was some days before his wife could be persuaded to go, but at last she said:

"We'll go, Joshuay, but," shaking her long forefinger at him, which meant she was in earnest, "don't you let me hear anything more about catching a swarm of bees."

CONVENTION DIRECTORY.

1888 *Time and Place of Meeting.*

Sept. 6.—Bees and Poultry, at New Brunswick, Ind. Ora Knowlton, Sec., New Brunswick, Ind.

Sept. 8.—Susquehanna County, at Montrose, Pa. H. M. Seeley, Sec., Harford, Pa.

Oct. 3-5.—North American, at Columbus, O. W. Z. Hutchinson, Sec., Flint, Mich.

Dec. —.—Michigan State, at Jackson, Mich. H. D. Cutting, Sec., Clinton, Mich.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER BOX

Limit Commission Men.—B. H. Standish, Evansville, Wis., on Aug. 22, 1888, writes thus:

I wish to caution beginners and all others who need it, to fix the price at which honey may be sold, when sending to commission men. If this price were fixed by supply and demand, it would now be quoted at 25 cents instead of 16 cents per pound. Who has produced honey at a cost less than 25 cents per pound this year? I think no one, and it ought to be quoted at that, and will be if producers limit salesmen to that price. It is an injustice to every brother bee-keeper, when one puts honey on the market which may be sold at half the cost of production.

Large Honey-Flow—Pure Italians.—R. H. Campbell, Madison, Ga., on Aug. 18, 1888, writes:

I have in my apiary four or five different kinds of hives, and among them 33 Heddon hives. I like them, and I believe that more extracted honey can be procured with them than with any other. Besides, they are light and nice to handle. We are having the largest flow of honey for August that I have ever seen; my hives are all loaded down. The honey is of fine flavor, and perfectly white, being gathered from cotton and field-peas. I have now 90 strong colonies ready for winter quarters. In this locality and county, hybrid and black bees have swarmed continually, while my Italians have swarmed but little, and had their hives full of honey. The pure Italians are the best bees of all. I have tried all known races, and I now have the Italians, which I find to be superior to any.

Bees Not Busy.—Mr. D. J. Winney, Schuylerville, N. Y., on Aug. 16, 1888, writes:

I notice by reports from various parts of the country, that in general bee-keeping will not be profitable this year. This section is no exception to that rule. I wintered, or began the past winter, with 19 colonies, 9 colonies in the cellar, and 10 in a bee-house, with chaff cushions on top of the bees. I lost 3 colonies, 2 in the cellar and 1 in the bee-house. The causes were diarrhea and starvation. Two colonies were robbed after I put them out, that left 14, which I have built up to 27, but they are lying around with nothing to do. I do not think that I will get over 100 pounds of surplus honey, unless it is from buckwheat, and of that I never have had much. Some of my bees have taken honey out of the sections that were not sealed, so I infer that they hardly get enough for present use, which is rather discouraging.

The Yield from Basswood, etc.—B. D. Scott, Ovid Centre, N. Y., on Aug. 17, 1888, writes:

I commenced the season with 56 colonies, increased them to 90, and have taken 3,600 pounds of extracted, and 300 pounds of comb honey in one-pound sections. Basswood yielded but little honey, but lasted well. The first blossoms opened on June 27, and I found fresh ones July 29. I have one colony on the scales, and the best day's work on basswood was 17½ pounds; on July 29 it gained 13½ pounds on clover and basswood mixed. But little honey is the general complaint among bee-keepers.

How to Hold the Breath.—L. D. Cheasbro, Conway, Iowa, on Aug. 15, 1888, says:

I notice by the BEE JOURNAL for to-day, that J. H. Amos has been trying the experiment of holding his breath to prevent bees from stinging. He says that it will not prevent it, but I believe it will, by half filling the lungs, and then holding the breath. The first time I filled my lungs to the full capacity, and could not help but let a very little escape, and was stung. But after that I never received a sting.

Bees Breeding Heavily, etc.—S. Shoup, Coloma, Mich., on Aug. 20, 1888, writes:

The honey crop in this part of the State, so far as I can learn, will be very light—may average 10 pounds per colony. My bees are breeding heavily now, and are storing some honey from buckwheat; but the weather continues dry, and I fear it will hurt young white clover for another season. I think that bees are generally in better condition for winter than last year at this time, and if we get rain to keep up fall bloom, some may get a little surplus.

No Rain for Six Weeks.—I. R. Good, Nappanee, Ind., on Aug. 20, 1888, says:

This has been the poorest season for honey and for queen-rearing that we have had since I have kept bees. There will be no surplus secured in this section. Six weeks ago last night we had our last rain, and everything is drying up. The prospects for a fall flow of honey are poor. Many colonies are almost in a starving condition.

One-Third of a Crop—Albino Bees.—H. P. Deahl, Berryville, Va., on Aug. 17, 1888, says:

The honey-crop here this season will be about one-third of a crop. Last spring I had 200 colonies, and obtained 5,000 lbs. of honey in one pound sections. I expected to get about 16,000 pounds. I will begin the winter with about 250 colonies. My Albino bees stored most of the honey.

Very Wet Weather.—Mr. Ezra J. Cronkleton, Dunlap, Iowa, on Aug. 14, 1888, says:

The weather has been very wet here for the last eight days, and it is raining now. If we can get a few days of fine weather, it will make a big difference in our fall crop of honey. Corn is being injured very much. Oats is half a crop.

Figwort, Sweet Clover and Culver's Physic.—L. E. Waterman, of Moline, Ills., on Aug. 19, 1888, writes thus about these plants for honey production:

I send two plants for name, besides which there is little attraction for the bees except sweet clover. I think it will pay any bee-keeper to plant sweet clover. I have seen C. H. Dibbern's three-acre patch since it bloomed, and I am satisfied that it pays. In fact, I think he is the only person getting any amount of honey in this locality, during the sweet clover period. I think that if the old stalks were taken off now, and the ground well harrowed, that it would bloom again next season.

[The plant with the long racemes of flowers is *Leptandra Virginica*, or Culver's physic. The other is figwort, or Simpson's honey-plant. Both are excellent honey-producers.—ED.]

Honey Crop of New York.—R. Bacon, Verona, N. Y., on Aug. 13, 1888, says:

The honey crop in this part of the country is very light, and from what I can gather, this State will not be able to put as much honey on the market this year as it did last.

Convention Notices.

☞ The Darke County Bee-Keepers' Society will hold a basket meeting on the Greenville Fair Grounds, on Friday, Sept. 7, 1888.
J. A. ROE, *Sec.*

☞ The North American Bee-Keepers' Society will meet at Columbus, O., on Wednesday, October 3, 1888, and continue as usual in session for three days. W. Z. HUTCHINSON, *Sec.*

☞ The Cortland Union Bee-Keepers' Association will hold their fourth annual picnic at the Floral-Trout Ponds, in Cortland, N. Y., on August 30, 1888. Let all bee-keepers and their friends come and have a good time. W. H. BEACH, *Sec.*

☞ The next semi-annual meeting of the Joint Bee and Poultry Keepers' Association of Boone and Hendricks counties will be held at the apiary of Wm. H Higgins, 2½ miles south of east from New Brunswick, Ind., on Thursday, Sept. 6, 1888. All interested are cordially invited to attend.
ORA KNOWLTON, *Sec.*

☞ The Susquehanna County Bee-Keepers' Association will meet in the Court House at Montrose, Pa., on Saturday, Sept. 8, 1888, at 10 a.m., Sharp. The following subjects will be considered: Preparing Bees for winter; Preparing for, and Marketing, Surplus Honey; Does the Raising of Small Fruit Conflict with Bee-Keeping? All bee-keepers are cordially invited to attend. H. M. SEELEY, *Sec.*

Can You Do Anything that will do more to advance and defend the pursuit of bee-keeping, than to aid its Weekly Exponent and Defender? The AMERICAN BEE JOURNAL is the pioneer bee-paper of America, and is fully entitled to the active support of every progressive apiarist, for it works constantly and faithfully for the best interests of the pursuit. We therefore specially request all our readers to use their influence to double our subscription list during the coming autumn. Reader, will you please send us a new subscription with your renewal or before that time? A good weekly at one dollar a year is surely cheap enough to command patronage.

New Subscribers can obtain the full numbers for 1887 and 1888, for $1.75, while there are any sets of 1887 left.

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ESTABLISHED IN 1861 — OLDEST BEE PAPER IN AMERICA

ALFRED H. NEWMAN,
BUSINESS MANAGER.

Business Notices.

If You Live near one post office and get your mail at another, be sure to give the address that we have on our list.

Hilton's new pamphlet on Comb Honey Production has been reduced in price to 5 cents. For sale at this office.

If you Lose Money by carelessly enclosing it in a letter, it is without excuse, when a Money Order, which is perfectly safe, costs but 5 cents.

Paper Boxes—to hold a section of honey for retail dealers. We have two sizes on hand to carry sections 4¼x4¼ and 5¼x5¼. Price, $1.00 per 100, or $8.50 per 1,000.

Preserve Your Papers for future reference. If you have no **BINDER** we will mail you one for 60 cents; or you can have one FREE, if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

Yucca Brushes, for removing bees from the combs, are a soft, vegetable fiber, and do not irritate the bees. We supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

Please write *American Bee Journal* on the envelope when writing to this office. Several of our letters have already gone to another firm (a commission house), causing vexatious delay and trouble.

Pure Phenol for Foul Brood.—Calvert's No. 1 phenol, mentioned in Cheshire's pamphlet on pages 16 and 17, can be procured at this office at 25 cents per ounce. Not being mailable, it must be sent by express.

Apiary Register.—All who intend to be systematic in their work in the apiary, should get a copy of the Apiary Register and begin to use it. The prices are as follows:

For 50 colonies (120 pages)	$1 00
" 100 colonies (220 pages)	1 25
" 200 colonies (420 pages)	1 50

Photographs of Bee-Keepers.—The "medley" gotten up by E. O. Tuttle, containing the faces of 131 representative apiarists, and a printed sketch of each one, will be sent with the BEE JOURNAL for one year for $1.75; or we will present it *free*, by mail, to any one, for a club of three subscribers and $3.00.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	Club
The American Bee Journal	1 00	
and Gleanings in Bee-Culture	2 00	1 75
Bee-Keepers' Magazine	1 50	1 40
Bee-Keepers' Guide	1 50	1 40
Bee-Keepers' Review	1 50	1 40
The Apiculturist	1 75	1 60
Canadian Bee Journal	2 00	1 80
Canadian Honey Producer	1 40	1 30
The 8 above-named papers	5 65	5 00
and Cook's Manual	2 25	2 00
Bees and Honey (Newman)	2 00	1 75
Binder for Am. Bee Journal	1 60	1 50
Dzierzon's Bee-Book (cloth)	3 00	2 00
Root's A B C of Bee-Culture	2 25	2 10
Farmer's Account Book	4 00	2 20
Western World Guide	1 50	1 30
Heddon's book, "Success,"	1 50	1 40
A Year Among the Bees	1 75	1 50
Convention Hand-Book	1 50	1 30
Weekly Inter-Ocean	2 00	1 75
Iowa Homestead	2 00	1 90
How to Propagate Fruit	1 50	1 25
History of National Society	1 50	1 25

Cork for Winter Packing.—Its advantages are that it never becomes *musty*, and it is *odorless*. Cushions can be made of cloth and filled with the cork, for winter packing. We can supply all orders now at 10 cents per pound. Or a seamless sack of it, containing 15 pounds, for $1.00.

Red Labels for Pails.—We have three sizes of these Labels, ranging in size for pails to hold from one to ten pounds of honey. Price, $1 for a hundred, with the name and address of the bee-keeper printed on them. Smaller quantities at one cent each; but we cannot print the name and address on less than 100. Larger quantities according to size, as follows:

	Size A.	Size B.	Size C.
250 Labels	$1.50	$2.00	$2 25
500 Labels	2 00	3.00	3 50
1,000 Labels	3.00	4.00	5.00

☞ Samples mailed free, upon application.

A Modern BEE-FARM, and its Economic Management; showing how bees may be cultivated as a means of livelihood; as a health-giving pursuit; and as a source of recreation to the busy man. By S. Simmins. For sale at this office. Price, $1.

We Supply Chapman Honey-Plant **SEED** at the following prices: One ounce, 40 cents; 4 ounces, $1; ¼ pound, $1.75; 1 pound, $3. One pound of seed is sufficient for half an acre, if properly thinned out and re-set.

Alfalfa Clover.—For habits and cultivation of this honey-plant, see page 245. We supply the seed at the following prices:—Per lb., 22c.; per peck, $3.00; per half-bushel, $5.50; per bushel of 60 lb., $10.00. If wanted by mail, add 18 cents per pound for bag and postage.

Conventions.—The time for holding Bee-Keepers' Conventions will soon be here, and we cannot give any better advice than this: Let each one attend who can do so, and take part in making these meetings interesting and instructive. If you have not already obtained the "Bee-Keeper's Convention Hand Book," do so at once to post yourself up on how to conduct such meetings correctly. It contains a simple Manual of Parliamentary Law and Rules of Order for the guidance of officers and members of Local Conventions—Model Constitution and By-Laws for a Local Society—Programme for a Convention, with Subjects for Discussion—List of Premiums for Fairs, etc. Bound in cloth, and suitable for the pocket. Price, 50 cents. We will club this book and the AMERICAN BEE JOURNAL for one year for $1.25.

Clover Seeds.—We are selling *Alsike Clover Seed* at the following prices: $8.00 per bushel; $2.25 per peck; 25 cents per lb. *White Clover Seed:* $10.00 per bushel; $2.75 per peck; 30 cents per lb. *Sweet, or Melilot, Clover Seed:* $6.00 per bushel; $1.75 per peck: 20 cents per lb.—by express or freight.

Colored Posters for putting up over honey exhibits at Fairs are quite attractive, as well as useful. We have prepared some for the BEE JOURNAL, and will send two or more free of cost to any one who will use them, and try to get up a club.

Exchange.—We will accept Honey and Beeswax in exchange for Bee-Keepers' Supplies in any quantity. Those desiring to make a trade are invited to correspond with us, stating quantity, quality, and price, and the goods they want in exchange.

The Convention.—The pamphlet containing the report of the proceedings of the Union Convention in Chicago, Ills., is published, and can be obtained at this office for 25 cents. Or bound up with the history of the International Society, and a full report of the Detroit and Indianapolis conventions, for 50 cents, postpaid.

Home Markets for honey can be made by judiciously distributing the pamphlets, "Honey as Food and Medicine." Such will create a demand in any locality at remunerative prices. See list on the second page of this paper.

Please to get your Neighbor, who keeps bees, to also take the AMERICAN BEE JOURNAL. It is now SO CHEAP that no one can afford to do without it.

Your Full Address, plainly written, is very essential in order to avoid mistakes.

Scatter the Leaflets.—Look at the list (with prices) on the second page.

Honey and Beeswax Market.

NEW YORK.

HONEY.—Market is bare of extracted, but choice white clover or basswood will bring from 7½@8c. Southern extracted, 55@60c. per gallon, as to quality.
BEESWAX.—Dull at 23c.
HILDRETH BROS. & SEGELKEN,
Aug. 23. 28 & 30 W. Broadway, near Duane St.

SAN FRANCISCO.

HONEY.—We quote: White to extra white comb, 17½@15c.; amber, 8@11c. Extracted, white to extra white, 5½@6c.; amber, 4½@5c. Arrivals of the new crop are small, the estimates being an average crop.
BEESWAX.—20@24c.
June 18. O. B. SMITH & CO., 423 Front St.

DETROIT.

HONEY.—Best new white comb, 15@16c, with little in sight and slow sales. Market is low, and bee-keepers will do better to hold honey until approach of cold weather.
BEESWAX.—21@22c. Supply limited.
Aug. 22. M. H. HUNT, Bell Branch, Mich.

CHICAGO.

HONEY.—New crop offered at 16@17c., demand being very light yet. Extracted is not in much demand, and prices are nominal at 7@8c. for the best grades.
BEESWAX.—22c. R. A. BURNETT,
Aug. 14. 161 South Water St.

NEW YORK.

HONEY.—We quote: Fancy white 1-lb. sections, 12c.; fancy 2-lbs., 10@11c.; fair white 1-lbs., 10@11c., and fair 2-lbs., 8@9c. Buckwheat 1-lbs., 7@8c. The demand is dull for comb but fair for extracted, of which new from the South is arriving, and sells for 55@65c. per gallon.
BEESWAX—Dull at 23½@24c.
Jun. 15. F. G. STROHMEYER & CO., 122 Water St.

CHICAGO.

HONEY.—None here, and market in good condition for new crop. There is some demand for the extracted.
BEESWAX.—22c.
Aug. 2. S. T. FISH & CO., 189 S. Water St.

CINCINNATI.

HONEY.—We quote extracted at 5@8c. per lb., for which demand is fair. Comb honey, 12@16c.—Supply is large of last year's comb honey, and for which the demand is slow.
BEESWAX.—Demand is good—20@22c. per lb. for good to choice yellow, on arrival.
Aug. 15. C. F. MUTH & SON, Freeman & Central Av.

MILWAUKEE.

HONEY.—Choice white one-lb. sections, 14@16c.; 2-lbs., 13@14c.; 3-lbs., 12@13c. Extracted, white in kegs and ½-barrels, 8@8½c.; in tin and pails, 9½@10c.; dark in barrels and kegs, 6@6½c. Demand good for extracted, but dull for comb.
BEESWAX.—22@25c.
July 2. A. V. BISHOP, 142 W. Water St.

DENVER.

HONEY.—Best white 1-lb. sections, 14@15c.; 2-lb. sections, 12c. Extracted, 6@7c.
BEESWAX.—20@23c.
Jun. 25. J. M. CLARK & CO., 1409 Fifteenth St.

KANSAS CITY.

HONEY.—We quote: 1-lb. sections, not glassed, at 18c.; 2-lb. sections and dark ones, also extracted, is not in demand. New honey is arriving freely, with a fair demand. This part of the State is favored with half a crop.
BEESWAX.—None in market.
July 20. HAMBLIN & BEARSS, 514 Walnut St.

BOSTON.

HONEY.—We quote: 1-lb. sections, 14@16c.; 2-lb. sections, 12@13c. New Florida extracted, 8@9c. Sales are very dull.
BEESWAX.—25 cts. per lb.
July 5. BLAKE & RIPLEY, 57 Chatham Street.

SAN FRANCISCO.

HONEY.—We quote: Extracted, white, 5½ cents; light, 5¼c.; amber, 4½@5c. Comb, 1-lbs., 12@14c.; 2-lbs., 9@13c., as to quality. Arrivals not large, and supplies held firmly.
BEESWAX.—Dull at 19@22c.
Aug. 20. SCHACHT & LEMCKE, 122-124 Davis St.

KANSAS CITY.

HONEY.—We quote: White 1-lbs., unglassed, 18 to 20 cts.; 2-lbs., 15@16c. California white 1-lbs., 18c.; 2-lbs., 15c.; extracted, white, 8c.—amber, 7c.
BEESWAX.—None on the market.
Aug. 10. CLEMONS, CLOON & CO., cor 4th & Walnut.

ST. LOUIS.

HONEY.—We quote: Extracted, dark, 4@4½c.; bright, 5@5½c.; in cans, 7@8c. Comb, white clover in prime condition, 13½@15c.; dark, 11½@12½ cts.—Market quiet, demand good and receipts light.
BEESWAX.—22c. for prime.
Aug. 10. D. G. TUTT & CO., Commercial St.

Always Mention your Post-Office, County and State when writing to this office. No matter where you may happen to be for the hour when actually writing—never mention anything but your permanent address. To do otherwise leads to confusion, unless you desire your address changed. In that case state the old as well as the new address.

We Want 20,000 subscribers. Out of the 300,000 bee-keepers in America, certainly this is not an extravagant desire! It is only one out of every fifteen! We confidently ask those who appreciate the AMERICAN BEE JOURNAL, to show it by sending us one or more new subscribers. We will give them full value for their money.

Give a Copy of "Honey as Food and Medicine" to every one who buys a package of honey. It will sell lots of it.

Advertisements.

PURE Untested Italian Queen....$1 00
Tested Queen, offspring pure Italian. 2 00
Select Tested Italian Queen—extra fine.. 2.50
Hybrid breeding Italian Queen 50
Sent by return mail. Direct to,
E. L. BRIGGS,
33D2t WILTON JUNCTION, IOWA.
Mention the American Bee Journal.

HANDSOME
ONE-PIECE SECTIONS.
WE have a limited quantity of One-Pound Sections, 4¼x4¼, a trifle less than two inches wide, with narrow tops, in packages of 1,000 each. They are manufactured from extra white lumber planed on both sides, making them the finest and most attractive honey-section in the world. Price, $4.00 per package.
THOS. G. NEWMAN & SON,
923 & 925 West Madison-Street, - CHICAGO, ILLS.

Patent Flat-Bottom Comb Foundation

High Side Walls, 4 to 14 square feet to the pound. Wholesale and Retail. Circulars and Samples free
J. VAN DEUSEN & SONS,
(SOLE MANUFACTURERS),
1Atf SPROUT BROOK, Mont. Co., N. Y.
Mention the American Bee Journal.

A POSITIVE FACT:
QUEENS by return mail, from the old and reliable
KNICKERBOCKER BEE-FARM.
(Established 1880.)
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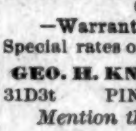
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